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Afrotropical Tabanidae (Diptera): the genus *Rhigioglossa* Wiedemann, 1828 (including *Mesomyia* Macquart, 1850, as a subgenus)

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ABSTRACT

The genus *Rhigioglossa* Wiedemann, 1828 (now including *Dasycompsa* Enderlein, *Mesomyia* Macquart, *Perisilvius* Enderlein, *Pronopes* Loew and *Pseudoscaptia* Enderlein as subgenera) is revised. *Bacloceras* Austen is placed in synonymy with subgenus *Mesomyia*. *Rhinomyzopsis* Séguy is provisionally reinstated as a distinct genus.

Rhigioglossa is restricted to the Afrotropical region (excepting 3 Australian species). Austro-Oriental, Australasian and Neotropical species formerly grouped with *Mesomyia* are placed in either *Lilaea* Walker or *Pseudotabanus* Ricardo. *Coracella* Philip is placed as a new synonym of *Pseudotabanus*.

Eight new species of *Rhigioglossa* are described: *andrewesi, capensis, flavibasalis, lineacallosa, milleri, munroi, namibiensis* and *nitens*. The male of *marieps* and the female of *nyassica* are recognised for the first time.

New combinations in *Rhigioglossa: algoensis* Oldroyd, *anomala* Oldroyd, *apiformis* Neave, *argentea* Oldroyd, *aurantiaca* Oldroyd, *barnardi* Oldroyd, *callosa* Ricardo, *confluens* Loew, *constrictifrons* Oldroyd, *contraria* Austen, *coriaria* Oldroyd, *costata* Loew, *cuneata* Loew, *cydister* Taylor, *decora* Macquart, *designata* Oldroyd, *divergens* Oldroyd, *fallax* Austen, *flavipes* Hine, *hirsuta* Ricardo, *kiboriani* Lamerton, *latifrons* Mackerras, *marieps* Usher, *monticola* Neave, *mossambicensis* Dias, *namaquina* Oldroyd, *nigricans* Loew, *nigrita* Chainey & Oldroyd, *nyassica* Enderlein, *provincialis* Oldroyd, *redunda* Oldroyd, *seyrigi* Séguy, *stannusi* Oldroyd, *tepperi* Ferguson, *tinleyi* Usher.

New combinations in *Lilaea: atrata* Schuurmans Stekhoven, *dimidiata* Wulp, *femoralis* Ricardo, *fuliginosa* Taylor, *mansoni* Summers, *norrisi* Mackerras, *paralurida* Ferguson & Hill, *stradbrokei* Taylor.

New combinations in *Pseudotabanus: alcocki* Summers, *araucanus* Coscaron, *ater* Taylor, *burnsi* Mackerras, *carbo* Macquart, *doddi* Ricardo, *equinus* Ferguson & Hill, *eyreanus* Mackerras, *fergusoni* Ricardo, *frontalis* Ricardo, *fulvissimus* Mackerras, *fuscipennis* Ricardo, *grandis* Ricardo, *imitator* Ferguson, *lunulatus* Bigot, *montanus* Ricardo, *nigerrimus* Mackerras, *nigripennis* Ricardo, *obscurus* Mackerras, *peregrinus* Mackerras, *pullus* Mackerras, *rubricornis* Kröber, *silvester* Bergroth, *sulcifrons* Ferguson, *taylori* Mackerras, *trypherus* Taylor.

Other species excluded from *Rhigioglossa: Diachlorus barbatus* Bigot is placed as a senior synonym of *Surcoufia paradoxa* Kröber and *Tabanus oritensis* Bigot is placed as a senior synonym of *Apatolestes villosulus* Bigot.

INTRODUCTION

Since the work of Mackerras (1955) and Oldroyd (1957) it has been accepted that various elements of the more generalised Bouvieromyiini are best placed as subgenera within a single broad genus for which the name *Mesomyia* Macquart has been used. As discussed by Mackerras (1955:594), determining the limits of such a concept is very much a matter of opinion, depending on how much weight is given to any particular character.

One of the more problematical subjects has been the treatment of *Rhigioglossa* Wiedemann, 1828, because it pre-dates *Mesomyia* Macquart, 1850. Mackerras (1955) treated *Rhigioglossa* as generically distinct from *Mesomyia* on the basis of the 'shining frons without callus and reduced antennal annuli'. He evidently also wished to avoid using the name *Rhigioglossa* in a broad sense since he considered the type-species, *edentula* Wiedemann, to be one of a 'small and aberrant element in the complex'.

Oldroyd (1957) considered *Rhigioglossa* to be of no more than subgeneric significance and showed that the apparent reduction in antennal segments was illusory. However, he disputed the authorship and date of *Rhigioglossa* and so used the next available name, *Erodiorhynchus* Macquart, 1838, for the group. This he placed as a subgenus of *Mesomyia*, choosing to ignore the fact that *Erodiorhynchus* also pre-dates *Mesomyia*. This was corrected by Dias & de Sousa (1957). Usher (1965), however, treated *Erodiorhynchus* as a genus distinct from *Mesomyia*, stating that this was not purely for nomenclatural reasons but 'because I am convinced the change is justified on all grounds', but without citing any evidence in support of this action. Chainey & Oldroyd (1980) reinstated *Rhigioglossa* (with *Erodiorhynchus* as a synonym) as available under ICZN *Code* Article 11(d), but listed it as a genus distinct from *Mesomyia*.

I have decided to follow Oldroyd (1957) in treating *Rhigioglossa* (= *Erodiorhynchus*) and *Mesomyia* as having no more than subgeneric value. The species of *Rhigioglossa* (*s. str.*) show a range of head structures that make them difficult to segregate on even a subgeneric basis (see key to subgenera). However, I do not agree that the earlier names can be ignored or merit suppression by an ICZN opinion, and I am therefore amending the status of *Mesomyia* to that of a subgenus of *Rhigioglossa*. Those Afrotropical elements previously treated as subgenera of *Mesomyia* are similarly placed within *Rhigioglossa* (with certain exceptions which are discussed elsewhere in this paper).

Genus *Rhigioglossa* Wiedemann

Rhigioglossa Wiedemann, 1828:105. Type species: *Rhinomyza edentula* Wiedemann, 1828, by monotypy (as *edentula* with *'Rhigioglossa testacea'* Wiedemann loc. cit. in synonymy). [Generic name first published in synonymy with *Rhinomyza* but available under ICZN *Code* Article 11(d).]

The genus *Rhigioglossa* is here defined as including species of Chrysopsinae that have the following combination of characters. Eyes bare or pilose, without pattern; frons divergent below or parallel; never convergent in females, exceptionally so in males that have the eyes separated; subcallus usually pollinose, if shining and somewhat swollen this is not in contrast to adjacent facial and frontal areas; antennae with five flagellar segments or fewer and with scape at most slightly longer than pedicel, roughly triangular in shape; well-developed mouthparts; hind-tibiae with two well-developed spurs; all posterior cells open; vein Sc bare; wings without distinct bands of colour though there may be spotting at the crossveins and forks, or colour may be uniformly spread or concentrated in the costal cell.

It has to be admitted that this definition is largely one of convenience rather than one based on synapomorphic characters. However, at present it seems to be the most practical way of dealing with the group given the paucity of external structures and the variability of those characters that are available. I have felt reluctant to carry out any detailed study of internal structures since many species are known only from single specimens and experience with tabanid genitalia has shown that differences are likely to be subtle and equally difficult to interpret. Unfortunately many species are apparently very rare or even extinct, so there may never be sufficient material (eg. of immature stages) with which to establish a more meaningful classification.

Although this paper is concerned primarily with Afrotropical species, some wider discussion of the above definition is relevant since, with the exception of 3 relict Australian species, it effectively excludes the Austro-Oriental, Australasian and Neotropical groups that have previously been assigned to *Mesomyia*. This is largely because I consider that those groups that have vein Sc setulose ventrally should be accorded at least generic status in view of the apparent significance of this character elsewhere in the family. All Pangoniinae have vein Sc bare whereas all Tabaninae have it setulose, at least ventrally (except the monotypic *Heptatoma*). Within the Chrysopsinae, however, this character has some differential value. All Chrysopsini have vein Sc bare. All Rhinomyzini have it setulose (the single Neotropical genus *Betrequia* is an exception but in several respects this seems doubtfully placed in this tribe). The Madagascan genus *Paulianomyia* is intermediate in having two or three setulae only at the distal end of vein Sc, but otherwise all Bouvieromyiini have it bare with the exception of the following groups: the Australian *Pseudopangonius* Ricardo, *Pseudotabanus* Ricardo, and 5 species formerly placed in *Mesomyia (s. str.)* and the Neotropical *Coracella* Philip. The last 3 of these groups are here considered congeneric (with *Pseudotabanus* Ricardo the oldest available name, including *Coracella*, **syn. n.**). Further assessment is beyond the scope of this paper but it should be noted that the tribal position of these genera must be regarded as uncertain, particularly since, in the Afrotropical fauna, certain Rhinomyzini are only separated from Bouvieromyiini by having vein Sc setulose.

Three other Austro-Oriental and Australasian groups have been placed in *Mesomyia*. These are *Lilaea* Walker, *Pareucompsa* Enderlein and 3 species assigned to *Mesomyia (Perisilvius)*. They have the female frons converging basally (sometimes strongly or occasionally almost parallel), which contrasts with *Rhigioglossa* where the female frons is parallel or diverging. They are probably best grouped as subgenera within *Lilaea* Walker, but the species formerly placed in *Perisilvius* would require a new subgeneric name if given such status. Further discussion of these groups is in preparation following the discovery of a striking new species from Papua New Guinea.

As noted above, three Australian species (*cydister* Taylor, *tepperi* Ferguson, *latifrons* Mackerras) are retained in subgenus *Mesomyia*.

BIOLOGY

Very little biological information is available for *Rhigioglossa*. Several species of the subgenera *Mesomyia*, *Perisilvius* and *Rhigioglossa* have been recorded biting man; in particular *R. (R.) capensis* sp. n. and *R. (R.) edentula* Wiedemann are active bloodsuckers (B. Stuckenberg—pers. comm.) and *R. (M.) fallax* Austen may be troublesome around waterholes (Neave 1912). Specimens of both sexes of *Rhigioglossa (s. str.)* frequently dusted with pollen may be caught on daisies in the W. Cape (B. Stuckenberg—pers. comm.). No immature stages have been described.

TAXONOMY

Key to subgenera of *Rhigioglossa* Wiedemann

1 ♀ frons pollinose, broader than high. ♂ with eyes clearly separated. Eyes distinctly hairy at low magnification. Subcallus sometimes greatly enlarged. [3 species, South Africa. See key below.] .... **Pronopes** Loew

— ♀ frons usually much higher than broad; if very broad then mostly bare and shining. ♂ eyes bare if widely separated 2

2 Almost entirely shining black species with hairy eyes, subshining or shining subcallus, face and parafacials; ♀ frons broad, subshining or shining, with indistinct callus. Antennae with prominent dorsal tooth (Figs. 22, 25, 26, 28, 30) [3 species, South Africa, See key below.] ...... **Pseudoscaptia** Enderlein

— Not with the above combination of characters 3

3 ♀ frons entirely pollinose, without callus. Eyes conspicuously hairy. Antennae with 4 (exceptionally 5) flagellar segments. Wings hyaline or lightly tinted with base contrastingly dark brown as far as vein *h* [1 species, *apiformis* Neave, Malaŵi; Cameroun, Congo, Ghana, Liberia, Nigeria, Tanzania, Zaïre. See Oldroyd 1957. Mozambique (Gorongosa); South Africa, Transvaal (Kruger Park) new records from NM. .... **Dasycompsa** Enderlein

— Frons with large callus, or if callus greatly reduced, eyes bare or wings not as above 4

4 Frons mostly shining black with only narrow lateral tomentose strips (most extensive in *pusilla* Schiner, Fig. 31). Median occipital sclerite distinctly shining. Eyes bare, or if with short hairs *(pusilla)*, then these are inconspicuous. Eyes occasionally widely separated in male. Subcallus usually hairy at sides (bare in *obtundata* Oldroyd). Proboscis often unusually long and slender [6 species, South Africa & Namibia. See key below.] .... **Rhigioglossa** Wiedemann

— Frons not as extensively shining (at most as in Figs. 5, 16). Median occipital sclerite dull tomentose, at most subshining. Eyes hairy or bare but never widely separated in male. Subcallus usually bare in bare-eyed species ... 5

5 Eyes distinctly hairy at low magnification, or if hairs short and inconspicuous (♀ *fallax* Austen) then frontal callus as Fig. 4 [7 species, Southern & Eastern Africa. See key below. Also 3 species, Australia. See Mackerras 1961.] ...... **Mesomyia** Macquart

— Eyes bare or microscopically haired. Frontal callus usually linear in form. [24 species, Southern & Eastern Africa, Madagascar. See key below.] .... **Perisilvius** Enderlein

Subgenus *Mesomyia* Macquart

Mesomyia Macquart, 1850:341 (37) (as genus). Type species: *Mesomyia decora* Macquart, 1850, by monotypy.

Bacloceras Austen, 1937*a*:31 [1937*b*:263]. Type species: *Bacloceras turneri* Austen, 1937, by original designation, **syn. n.**

Oldroyd (1957) provisionally placed *Bacloceras* as a subgenus within *Mesomyia* on the basis of the antennal structure, However, he noted that the type species, *turneri* Austen, would otherwise 'seem to be a normal *Mesomyia*, allied to *aurantiaca*'. Although the antennae appear unusual, the proportions are caused by only a slight swelling of the scape and a slight narrowing of the basal flagellomere (Fig. 6) so that it is not clearly differentiated from the rest of the flagellum. This impression is compounded by the colour of the flagellum which is entirely blackish except at the extreme base. In *aurantiaca* (Oldroyd) the basal flagellomere is orange, contrasting with the rest of the flagellum. Apart from the antennal differences *turneri* has the tibiae brown, contrasting with the yellow femora, whereas *aurantiaca* has the tibiae yellow though sometimes with dark hairs. These features seem to be of no more than specific significance and I am therefore including *Bacloceras* in synonymy with *Rhigioglossa (Mesomyia)*.

Key to species of *Rhigioglossa* (*Mesomyia*) [both sexes]

1 At least head, thoracic hairs and abdomen predominantly yellow-orange. Femora yellow-orange except at apices which are distinctly darker 2

— Not with the above combination of characters 3

2 Antennae with flagellum unusually slender (Fig. 6) and entirely blackish except at extreme base. Tibiae brown, contrasting with yellow femora [♀ unknown] .... **turneri** (Austen)

— Antennae of more usual proportions (Fig. 7); basal flagellomere orange, contrasting with black terminal segments. Tibiae at least yellow basally....... **aurantiaca** (Oldroyd)

3 Wings heavily mottled with dark brown spots on forks of veins. ♀ with frontal callus very small and indistinct. ♂ with abdomen extensively orange at sides **namaquina** (Oldroyd)

— Not with the above combination of characters 4

4 Frontal callus small, diamond shaped (Fig. 1). Abdomen dark brown with grey bands across hind-margins of tergites but without distinct median triangles or sublateral spots [♂ unknown] .... **munroi** sp. n.

— Frontal callus large, rounded or square (Figs. 4–5). Dorsum of abdomen with distinct median triangles and, usually, sublateral spots 5

5 Costal and basal costal cells dark brown, contrasting with rest of wing. ♀ frons broad and divergent with large rounded callus that is widely separated from eye-margin. ♂ with blackish femora contrasting with reddish-brown tibiae .... **hirsuta** (Ricardo)

— Costal cell clear as is rest of wing though basal costal cell and stigma may be dark. ♀ with frontal callus at most narrowly separated from eye-margin (Fig. 4). ♂ with femora reddish-brown, concolorous with tibiae 6

6 Wing with dark basal costal cell and stigma. ♂ with hairs of eyes brown and with thorax and abdomen obscured by thick silvery hairs. ♀ eyes with thick and conspicuous white hairs. Frons as in Fig. 4.......... **decora** (Macquart)

— Wing with clear basal costal cell and pale stigma. ♂ with hairs of eyes white and body hairs long but much sparser. ♀ eyes with short, inconspicuous white hairs and with frons as in Fig. 5 .... **fallax** (Austen)

Rhigioglossa (Mesomyia) aurantiaca (Oldroyd)

A male from South Africa, Cape Province, Du Toits Kloof, 5.i.1972 (BMNH Southern African Exp.), shows some differences from 2 ♂ paratypes (Cape Prov., Bainskloof & Table Mtn.). It has the eye hairs longer, the tibiae brownish apically and the median dark spots on the tergites with entirely long yellow hairs rather than mostly short black ones. On present material these differences are attributed to individual variation.

Rhigioglossa (Mesomyia) fallax (Austen)

Rhigioglossa (Mesomyia) fallax (Austen) was treated by Oldroyd (1957; as *Mesomyia schoutedeni* Bequaert) as a subspecies of *R. (M.) decora* (Macquart). However, the two forms have been found to occur together without apparent intergrades and, as listed in Chainey & Oldroyd (1980), are now regarded as distinct species.

Rhigioglossa (Mesomyia) munroi sp. n.

Description: Holotype ♀.

Head. Eyes distinctly light brown haired. Frons slightly divergent towards antennae, index approx. 2 (Fig. 1); yellowish-grey pollinose with scattered brown hairs and with a rather narrow diamond-shaped brown callus. Subcallus yellowish-grey pollinose without hairs. Face and parafacials similar but with rather long whitish hairs. Beard whitish. Antennae (Fig. 2) orange; scape and pedicel with whitish tomentum and mostly dark hairs. Palpi (Fig. 3) orange through whitish tomentum with mostly whitish hairs basally but some black hairs apically.

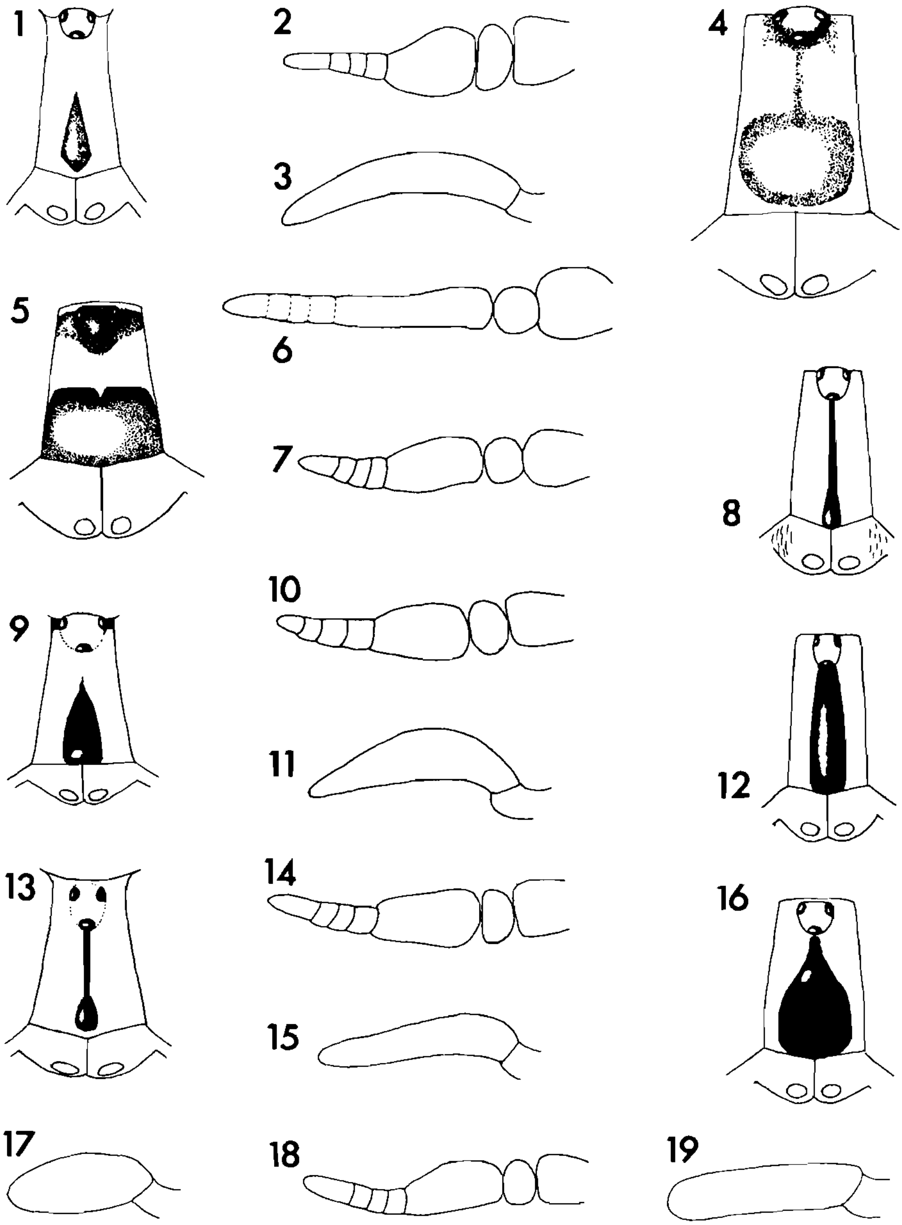
Thorax. Mesonotum greyish-brown pollinose, becoming more greyish posteriorly and laterally, with a pair of sublateral grey stripes and rather dense white hairs. Scutellum concolorous with adjacent part of mesonotum. Pleura and coxae greyish pollinose and densely white haired. Legs orange; femora light yellowish haired, tibiae mostly dark haired dorsally but with mixed light and dark hairs ventrally, tarsi with mixed hairs. Wings very faintly brownish tinted, costal cell not distinctly darker. Vein R_4 with appendix. Squamae and halteres light yellowish.

Abdomen. Tergites 1–4 dark brown with grey hind-margins that are expanded laterally; tergite 1 with entirely whitish hairs but otherwise hairs concolorous with background. Apart from a narrow hind-margin of pale hairs on tergite 5, rest of tergites dark brown with concolorous hairs. Sternites reddish-brown through grey tomentum, the hairs pale along the hind-margins but otherwise mostly dark.

Lengths. Body 10 mm, wing 8,5 mm.

Material examined. SOUTH AFRICA: ♀ holotype, Cape Province, East London, 21.ii.1923, H. K. Munro (NM). NM Type No. 3374.

Remarks. This species resembles *R. (Perisilvius) argentea* (Oldroyd) and the holotype of *munroi* is the specimen referred to by Usher (1972:473) as the (still) unknown ♀ of *argentea*. It is readily separated from *argentea* by its distinctly hairy eyes and almost clear wings.



Figs 1–19. (1–3) ♀ *Rhigioglossa (Mesomyia) munroi* sp. n.: (1) frons, (2) antenna, (3) palp. (4) ♀ *R. (M.) fallax* Austen: frons. (5) ♀ *R. (M.) decora* Macquart: frons. (6) ♂ *R. (M.) turneri* Austen: antenna. (7) ♂ *R. (M.) aurantiaca* Oldroyd: antenna. (8) ♀ *R. (Perisilvius) monticola* Neave: frons. (9–11) ♀ *R. (Per.) nyassica* Enderlein: (9) frons, (10) antenna, (11) palp. (12) ♀ *R. (Per.) redunda* Oldroyd: frons. (13–15) ♀ *R. (Per.) lineacallosa* sp. n.: (13) frons, (14) antenna, (15) palp. (16) ♀ *R. (Per.) provincialis* Oldroyd: frons. (17–18) ♂ *R. (Per.) andrewesi* sp. n.: (17) palp, (18) antenna. (19) ♂ *R. (Per.) marieps* Usher: palp.

Subgenus *Perisilvius* Enderlein

Perisilvius Enderlein, 1922:344 (as genus). Type species: *Perisilvius nyassicus* Enderlein, 1922, by original designation and monotypy ('gen. n., sp. n.').
Silviusopsis Séguy, 1950:294 (as genus). Type species: *Silviusopsis longirostris* Séguy, 1950 [= *Silvius seyrigi* Séguy, 1950], by original designation.
Tendeiroiella Dias, 1955:6 (as genus). Type species *Tendeiroiella mossambicensis* Dias, 1955, by original designation.

The species of this subgenus have the eyes bare (exceptionally microscopically haired) and the frons parallel or divergent, generally with a linear callus.

Perisilvius is the largest subgenus with 24 species recognised at present. Many are known from very few examples of one sex and since some species show strong sexual dimorphism, as well as some individual variation, single specimens can be difficult to assess.

Key to species of *Rhigioglossa (Perisilvius)*. [Adapted from Oldroyd 1957]

Females

[NB. The females of *algoensis, andrewesi, argentea, confluens, coriaria, seyrigi* are unknown.]

1 An almost uniformly black-brown species, including wings; 11–12 mm long [Madagascar] .... **nigrita** (Chainey & Oldroyd)
— Not with above combination of characters [African mainland] 2
2 Subcallus with black hairs 3
— Subcallus without hairs or, occasionally, with short pale hairs 4
3 Frontal callus linear (Fig. 8), about ¼ width of frons at base. Stigma pale and indistinct .... **monticola** (Neave)
— Frontal callus broader (Fig. 12), about ½ width of frons at base. Stigma narrow, but distinctly black-brown .... **redunda** (Oldroyd)
4 A large (13 mm) yellow or fulvous species with cylindrical, patternless abdomen. Antennae orange with terminal segments contrasting black. Frons broad and divergent (index 1,3). Wings smoky-yellow, spotted on crossveins and forks with darker grey .... **anomala** (Oldroyd)
— Not with the above combination of characters 5
5 Frons narrower (index 3 or greater), parallel-sided 6
— Frons broader (index 2,5 or less), usually divergent towards antennae ... 8
6 Legs red-brown. Pleura fulvous and entirely pale yellow haired .... **callosa** (Ricardo)
— Legs mainly black-brown. Pleura entirely black haired or with pale hairs only on mesopleuron 7
7 Pleura entirely dark brown with black hairs [East Africa] .... **kiboriani** (Lamerton)
— Pleura brown, becoming greyer posteriorly and with grey mesopleural patch; hairs pale on mesopleural patch, otherwise dark [South Africa] .... **tinleyi** (Usher)

8 Dorsum of abdomen shining dark brown, with very thin tomentum and without distinct pattern 9

— Dorsum of abdomen thickly tomented brown, with grey or whitish hind-margins and often distinct median triangles. If without pattern then abdomen not shining 10

9 Antennae with orange flagellum. Hind legs distinctly elongate; the hind femora about 1½ × the length of the mid femora and the hind tibiae becoming somewhat swollen apically in contrast to the fore and mid tibiae which are entirely slender. At least fore and mid femora yellow .... **cuneata** (Loew)

— Flagellum brown, only a little paler than the rest of antennae. Hind legs of normal proportions, the hind femora only a little longer than the mid femora and all the femora black-brown .... **contraria** (Austen)

10 Frontal callus greatly expanded (Fig. 16). Abdomen dorsally with rows of sublateral yellowish-grey spots in addition to large grey median triangles. Parafacials mostly white haired .... **provincialis** (Oldroyd)

— Not with the above combination of characters 11

11 Large *Tabanus*-like species (14–15 mm). Frons (index 2,5) slightly divergent. Wings clear or faintly infuscated along veins; stigma pale and indistinct. Tergites with bold white pollinose hind-margins expanding to median triangles **designata** (Oldroyd)

— Not with the above combination of characters 12

12 At least upper parafacials mostly white haired. Frons (index 1,8) strongly diverging. Tergites with distinct pale hind-margins expanding into obscure median triangles. At least mid and hind tibiae yellowish-brown, contrasting with black femora .... **barnardi** (Oldroyd)

— Not with the above combination of characters 13

13 Frontal callus greatly reduced (Fig. 20). Legs light red-brown. Wings very faintly yellowish with costal cell brown .... **stannusi** (Oldroyd)

— Not with the above combination of characters 14

14 Frons narrower (index approx. 2,5) 15

— Frons broader (index approx. 1,5) 16

15 Larger species (14–15 mm). Mesonotum with distinct whitish pre-scutellar crescents. Tergites 2–5 with bold pattern of whitish hind-margins and large median triangles .... **marieps** (Usher)

— Smaller species (11 mm). Mesonotum with at most faint pre-scutellar crescents. Tergites dark-brown with much less distinct hind-margins and median triangles .... **mossambicensis** (Dias)

16 Wings hyaline with yellow costal cell [East Africa] ...... **nyassica** (Enderlein)

— Wings smoky or brown with dark brown costal cell [South Africa] 17

17 Pleura grey pollinose, contrasting with dark brown legs. Stouter predominantly black species .... **lineacallosa** sp. n.

— Pleura dark brown, concolorous with legs. More slender, predominantly brown species .... **divergens** (Oldroyd)

Males

[NB, The male of *cuneata* (Loew) has not been recognised since the original description and the ♂ syntype is now lost. It has not been possible to place *cuneata* in the key to males but it should be recognisable if the hind legs are as elongate as those of the female. The males of *anomala, barnardi, divergens, lineacallosa, redunda, stannusi, tinleyi* are unknown.]

1 Wings almost uniformly dark brown, as is almost the whole body [Madagascar] 2
— Wings not uniformly dark brown [African mainland] 3
2 Eyes with upper facets much larger than lower facets and sharply divided from them .... **nigrita** (Chainey & Oldroyd)
— Eyes with upper and lower facets almost equal in size .... **seyrigi** (Séguy)
3 Subcallus with conspicuous tufts of black hairs .... **monticola** (Neave)
— Subcallus without hairs 4
4 Small (8 mm), slender species with narrow pointed abdomen that is pinkish-brown with a dark brown median stripe. Palpi abnormally long, almost as long as proboscis. Wings clear, without markings or distinct stigma .... **algoensis** (Oldroyd)
— Not with the above combination of characters 5
5 Parafacials entirely whitish or pale yellow haired 6
— Parafacials with at least some black hairs 7
6 Smaller species (9 mm). Tergites with very broad whitish hind-margins and mostly covered with white hairs that are quite long laterally. Costal cell and stigma yellow, contrasting with greyish apex of wing .... **argentea** (Oldroyd)
— Large (14–15 mm), robust species, Tergites with narrower pale hind-margins and extensively black haired areas. Wings clear or slightly infuscated along veins .... **designata** (Oldroyd)
7 Small (8,5 mm) species. Wings faintly brown tinted with darker costal cell but indistinct stigma. Legs entirely light reddish-brown. Abdomen black-brown dorsally with a pair of lateral orange stripes running its entire length .... **andrewesi** sp. n.
— Not with the above combination of characters 8
8 Legs uniformly black-brown. Wings smoky greyish-brown with darker costal cell .... **confluens** (Loew)
— At least mid- and hind tibiae reddish. Wings variable 9
9 Wings spotted on cross veins and forks 10
— Wings not spotted, though sometimes more uniformly tinted 13
10 Femora black-brown, contrasting with mostly yellow-brown tibiae. Abdomen with lateral orange areas on basal 3 tergites .... **contraria** (Austen)
— At least basal half of femora yellow-brown or legs uniformly reddish-brown 11
11 Legs yellow-brown but with apical half of mid- and hind femora darker and bases of tibiae more whitish. Tergites with elongate white triangles united into a narrow median stripe .... **coriaria** (Oldroyd)

— Legs uniformly reddish-brown. Median triangles of tergites less elongate, not uniting to form a median stripe 12

12 Larger species (12 mm). Mesonotum with distinct whitish pre-scutellar crescents. Tergites with distinct whitish hind-margins and median triangles ... **marieps** (Usher)

— Smaller species (9,5 mm). Mesonotum without distinct pre-scutellar crescents. Tergites with markings less distinct .... **mossambicensis** (Dias)

13 Upper eye facets much larger than lower facets and distinctly differentiated from them 14

— Upper and lower eye facets of roughly similar size, not distinctly differentiated 15

14 Wings faintly smoky with pale yellow costal cell and pale stigma [East Africa] **kiboriani** (Lamerton)

— Wings uniformly brown tinted with distinctly darker stigma [South Africa] .... **callosa** (Ricardo)

15 Legs brown. Wings light brown with costal cell a little darker. Tergites with indistinct hind-margins but with elongate median triangles forming a narrow pale median stripe [South Africa] .... **provincialis** (Oldroyd)

— Femora black, tibiae a little paler and more yellowish at base. Wings faintly smoky with yellow costal cell. Tergites with distinct pale hind-margins but with only traces of median triangles [East Africa] .... **nyassica** (Enderlein)

Rhigioglossa (Perisilvius) andrewesi sp. n.

Description. Holotype ♂

Head. Eyes bare. Distinct raised ocelli at vertex. Subcallus, face and parafacials dull brown pollinose; face without hairs, inner parafacials with yellowish hairs and outer parafacials black haired. Beard pale yellowish. Antennae (Fig. 18): scape and pedicel yellow-brown with black hairs; flagellum orange basally but becoming darker apically. Palpi (Fig. 17) yellow-brown, dorsally without hairs but otherwise with long mixed black and yellow hairs. Proboscis short, yellow-brown.

Thorax. Mesonotum blackish with three indistinct grey pollinose stripes and with rather sparse mixed black, yellow and whitish hairs. Pleura red-brown through thick grey tomentum, mostly long yellowish haired. Scutellum black-brown with scattered dark and pale hairs. Legs light reddish-brown with mostly black hairs though femora also with yellowish hairs. Wings very lightly brown tinted, darker in costal cell. Squamae pale yellowish. Halteres yellow-brown.

Abdomen. Tergites mostly black-brown with narrow paler hind-margins and with lateral orange patches that unite to form a pair of stripes running the full length of the abdomen; hairs black except for pale hairs on the hind-margins which are expanded medially into small triangles. Venter entirely orange with mostly pale yellowish hairs.

Lengths. Body 8,5 mm, wing 8 mm.

Material examined. SOUTH AFRICA: ♂ holotype, Cape Province, Ongeluks Nek, 11.xi.1957, C. H. Andrewes (BMNH).

Rhigioglossa (Perisilvius) barnardi (Oldroyd)

A single female from Natal may be this species, which is only known from the female holotype, but differs in being slightly smaller with the subcallus with short white hairs, scutellum without long pale hairs, wings smoky with slightly darker infuscation along the veins and a short appendix to vein R_4. On present material I hesitate to describe it as new. The specimen has the following data: SOUTH AFRICA, Natal, Mont-aux-Sources, Tugela Gorge, 4.i.1983, B. R. Stuckenberg (NM). The locality is distant from that of the type of *barnardi* (ie Seven Weeks Poort Berg, near Ladismith).

Rhigioglossa (Perisilvius) divergens (Oldroyd)

A single female (labelled SOUTH AFRICA, Natal, Eshowe, Dlinza Forest Reserve, 450 m, (2831CD), 20–23.xi.1978, J. G. H. Londt (NM)) may be *divergens* but is distinctly paler and yellower than is typical and has yellow hairs on the hind-margins of each tergite. The ♀ holotype (from Port Natal) and 1 ♀ paratype (from Durban) of *divergens* show some variation in the extent of yellow hairing on the abdomen though both are dark brown in appearance.

Rhigioglossa (Perisilvius) lineacallosa sp. n.

Description. Holotype ♀.

Head. Eyes bare. Frons (Fig. 13) slightly higher than width at base, strongly divergent towards antennae; dark brown pollinose with linear black-brown callus and short light brown hairs. Subcallus dark brown pollinose without hairs. Face and parafacials brownish-grey pollinose; parafacials with short dark hairs. Deep, shining black tentorial pits at sides of face. Antennae (Fig. 14) dark red-brown: scape and pedicel short black haired and flagellum with terminal segments blackish. Palpi (Fig. 15) slightly swollen basally; dull red-brown with thin greyish tomentum and dark hairs. Proboscis short, less than height of head and with large fleshy labellae; black.

Thorax. Mesonotum and scutellum shining black through grey tomentum which thickens to form indistinct median and sublateral stripes; short, mostly black haired. Pleura grey pollinose with short black hairs on mesopleuron but otherwise pale brownish hairs. Femora dark reddish-brown with blackish hairs. Tibiae and tarsi blackish with concolorous hairs. Wings light smoky-brown tinted, becoming darker towards costal cell. Squamae light brown. Halteres brown, creamy on knob.

Abdomen. Dorsum subshining black-brown, obscurely reddish laterally on tergites 1–3. Hind-margins of tergites narrowly paler, expanding into median triangles. Mostly short black haired except laterally and on hind-margins and median triangles where the hairs are whitish. Venter reddish grey-brown with mostly black hairs except along hind-margins where they are whitish.

Lengths. Body 10 mm, wing 8,5 mm.

Material examined. SOUTH AFRICA: ♀ holotype, Cape Province, Rhodes area (3027DD), 9–10.i.1979, J. G. H. Londt & B. R. Stuckenberg (NM); 2 ♀ paratypes, same data (NM, BMNH) captured in high altitude montane grassland (NM Type No. 3375).

Remarks. This species is characterised by its broad, divergent frons, subcallus without hairs, parafacials with dark hairs, dark legs and costal cell and the abdominal pattern.

Rhigioglossa (Perisilvius) marieps (Usher)

The only published record of this species is that of the ♀ holotype. I have seen 1 ♂ 1 ♀ with the following data: SOUTH AFRICA, Transvaal, Pilgrim's Rest District, Kowyn's Pass, 22.ii.1962, Vari & Leleup (NM) (det. Usher). The ♀ agrees with the original description. The ♂ shows the usual sexual differences and is slightly smaller, and more reddish with less distinct markings and longer body hairs. The upper eye facets are moderately enlarged but are not clearly differentiated from the lower facets. Palpi (Fig. 19) slender with very long brown hairs. The mesonotum has very long, entirely brown hairs.

Rhigioglossa (Perisilvius) nyassica (Enderlein)

Oldroyd (label on specimen) tentatively associated a single ♀ from Kenya with *nyassica* (Enderlein), which was previously only known from males, and I concur with his provisional identification. If this is correct, *nyassica* shows considerable sexual dimorphism and, as *nyassica* is the type species of *Perisilvius*, a full description of this ♀ is given.

Description. ♀ KENYA, Kiboko, 25.ii.1968, B. S. Hursey (BMNH).

Head. Eyes bare. Frons (Fig. 9) broad, divergent (index 1,3), brownish-grey pollinose with broad black-brown callus and short dark hairs. Subcallus slightly browner and without hairs. Face similar to subcallus but with black hairs and parafacials greyer, also with black hairs. Antennae (Fig. 10): scape and pedicel red-brown through grey tomentum, black haired; flagellum with basal segment orange, otherwise blackish. Palpi (Fig. 11) orange-brown with dark hairs and a bare area medially. Proboscis black-brown.

Thorax. Mesonotum black-brown, with three indistinct grey pollinose stripes, and mixed light and dark hairs. Scutellum greyer with mostly whitish hairs. Humeral and notopleural lobes somewhat paler than mesonotum. Pleura dark brown through brownish-grey tomentum with dark hairs except on sternopleuron which has yellowish hairs. Legs black-brown with concolorous hairs; the bases of tibiae slightly paler. Wing hyaline except for yellow costal cell and stigma. Vein R_4 without appendix. Squamae pale yellow. Halteres black-brown.

Abdomen. Basal tergites obscurely reddish at sides, otherwise tergites black-brown with pale hind-margins and median triangles which almost unite into a stripe on segments 3–5; hairs mostly concolorous with background. Venter similar but more reddish basally and without median triangles.

Lengths. 10 mm, wing 8,5 mm.

Remarks. Assuming its correct placement, the ♀ of *nyassica* is distinguished by the broad, divergent frons with large callus, parafacials with black hairs, black femora, clear wings with yellow costal cell and stigma, and the abdominal pattern.

Subgenus *Pronopes* Loew

Pronopes Loew, 1858:339 (as genus). Type species: *Pronopes nigricans* Loew, 1858, by monotypy.

This subgenus groups three little-known species with distinctly hairy eyes which are clearly separated in the male. The subcallus is greatly enlarged in *nigricans* and ♀ *flavipes*, prominent in *constrictifrons* but only moderately so in ♂ *flavipes*.

Key to species of *Rhigioglossa* (*Pronopes*) [Adapted from Oldroyd 1957; both sexes].

1 Subcallus and ocellar tubercle so enlarged that they almost meet and obliterate the frons. Abdomen black, obscurely reddish at extreme sides, with long yellowish hairs [♀ unknown] .... ♂ **nigricans** (Loew)

— Frons well developed even if subcallus is greatly enlarged. Abdomen with much more distinct pattern 2

2 Subcallus greatly enlarged and swollen and merging, without clear line of separation, into the frons which is broader than one eye. Abdomen dark brown with conspicuous pale grey hind-margins .... ♀ **flavipes** (Hine)

— Subcallus less swollen and differentiated from frons. Abdomen orange with black spots 3

3 Frons about as broad as one eye. Legs orange with black tips to femora....... ♂ **flavipes** (Hine)

— Frons covergent, at its narrowest about as broad as first antennal segment. Femora brownish with yellow hairs without conspicuous dark tips [♀ unknown] .... ♂ **constrictifrons** (Oldroyd)

Subgenus *Pseudoscaptia* Enderlein **stat. n.**

Pseudoscaptia Enderlein, 1922:338 (as genus). Type species *Pseudoscaptia scoliiformis* Enderlein, 1922 [= *Rhinomyza costata* Loew, 1860], by original designation and monotypy ('gen. n., sp. n.').

Oldroyd (1957) included *Pseudoscaptia* within *Mesomyia* (*s. str.*) though he noted that the type species, *scoliiformis* Enderlein [= *costata* (Loew)], was 'most distinctive'. Two new species, closely related to *costata*, are described below and, together, these 3 species form a group that, in view of their mutual similarity and their distinctness from the rest of *Mesomyia*, seems to warrant some recognition. The subgenus may be recognised from the characters given in the key.

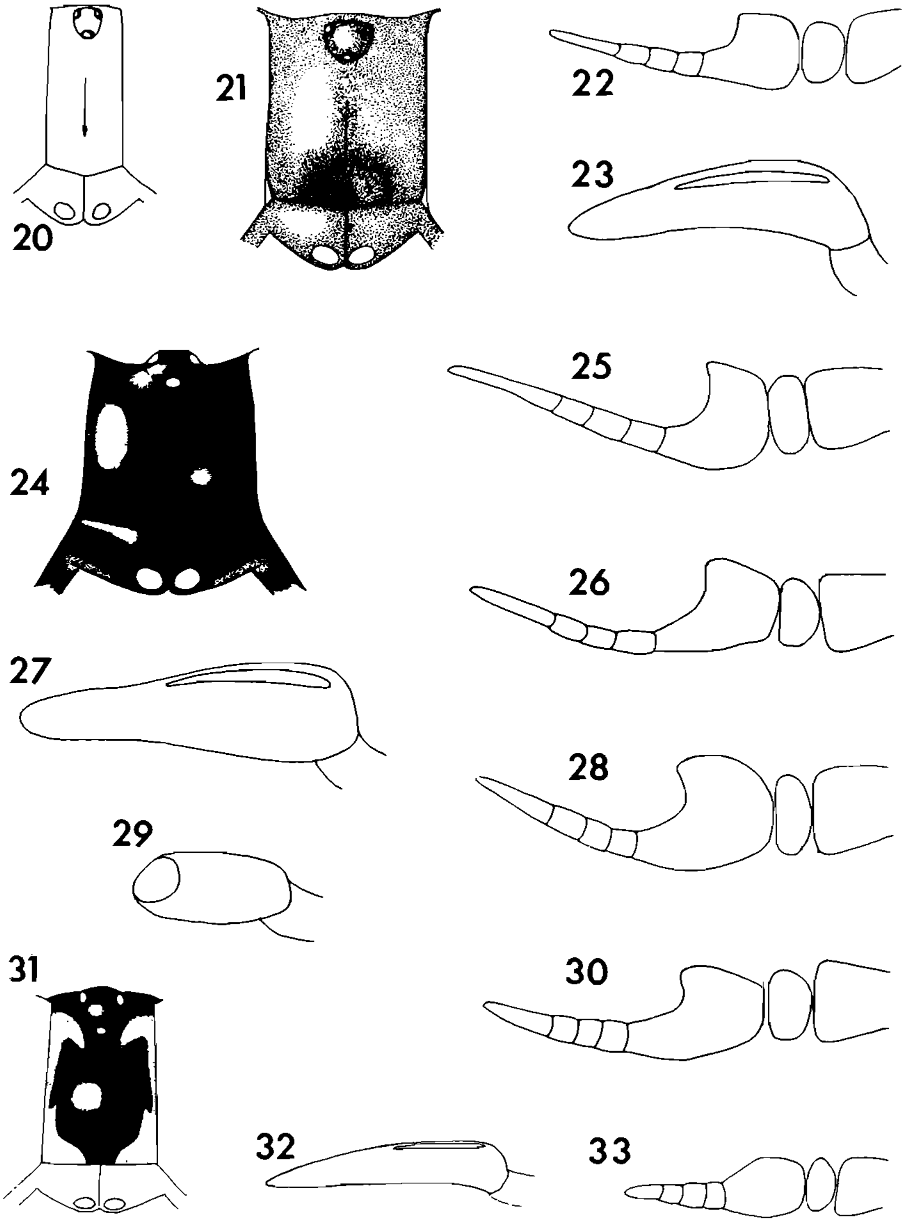
Key to species of *Rhigioglossa* (*Pseudoscaptia*) [both sexes]

1 Wings smoky-brown with extreme base contrasting orange-yellow. Mesonotum with 3 grey pollinose stripes [♂ unknown] .... ♀ **flavibasalis** sp. n.

— Wings entirely smoky-brown (♀) or hyaline with conspicuously darker costal cell (♂). Mesonotum entirely shining black-brown 2

2 Antennae relatively shorter and stouter (Figs 28, 30). Hair tuft on squamae dark brown or black, ie concolorous with rest of body hairs. ♂ wings (excluding costal cell) glass clear .... **costata** (Loew)

— Antennae relatively longer and more slender (Figs 25–26). Hair tuft on squamae white, contrasting with rest of body hairs which are black. ♂ wings (excluding costal cell) very faintly smoky .... **milleri** sp. n.



Figs 20–33. (20) ♀ *R. (Per.) stannusi* Oldroyd: frons. (21–23) ♀ *R. (Pseudoscaptia) flavibasalis* sp. n.: (21) frons, (22) antenna, (23) palp. (24–27, 29) *R. (Ps.) milleri*: (24) ♀ frons, (25) ♀ antenna, (26) ♂ antenna, (27) ♀ palp, (29) ♂ palp. (28, 30) *R. (Ps.) costata* Loew: (28) ♀ antenna, (30) ♂ antenna. (31–33) ♀ *R. (s. str.) pusilla* Schiner: (31) frons, (32) antenna, (33) palp.

Rhigioglossa (Pseudoscaptia) flavibasalis sp. n.

Description. Holotype ♀.

Head. Eyes with short hairs that are inconspicuous at low magnification. Frons (Fig. 21) slightly higher than broad, sunken medially and shining dark brown through thin tomentum; callus poorly defined. Post-occipital rim orange with scattered dark hairs. Subcallus subshining dark brown with thin greyish tomentum at sides of antennae. Face and parafacials subshining dark brown; parafacials with black hairs. Antennae (Fig. 22): scape and pedicel dull orange with black hairs; flagellum bright orange. Palpi (Fig. 23): segment 1 dark brown with concolorous hairs and segment 2 dull orange with blackish hairs and a deep median longitudinal groove. Proboscis dark brown.

Thorax. Mesonotum shining black-brown with 3 rather broad, though inconspicuous, grey pollinose stripes; humeral lobe with pale greyish tomentum; entirely black haired. Scutellum and pleura shining black-brown with concolorous hairs. Legs entirely black-brown and, excepting some orange hairs on the ventral surface of the tarsi, with concolorous hairs. Wings rather uniformly smoky-brown with extreme base, ie as far as vein *h* and including alula, contrasting orange-yellow. Squamae pale yellow with concolorous hairs. Halteres dark brown.

Abdomen. Entirely shining black with concolorous hairs except for the genitalia which are orange.

Lengths. Body 11 mm, wing 9 mm.

Material examined. SOUTH AFRICA: ♀ holotype, Capland Willowmore, Dr. Brauns (BMNH); 1 ♀ paratype, same data but dated 15.i(?).1922 (NM); 1 ♀ paratype, Cape Province, 16 miles E. of Cradock Farm 'Who can tell', 1 000 m, 11.iii.1972, M. E. & B. J. Irwin (NM). NM Type No 3376.

Remarks. One paratype has the frons somewhat divergent towards the antennae with an index of 1.

Rhigioglossa (Pseudoscaptia) milleri sp. n.

Description. Holotype ♀.

Head. Eyes with short but distinct hairs. Frons (Fig. 24) shining black-brown, slightly broader than high, sunken medially and without defined callus; vertex with long black hairs otherwise frons with short black hairs. Subcallus shining dark brown with thin greyish tomentum at sides of antennae and short black hairs. Face and parafacials shining black-brown with black hairs. Post-occipital rim orange with dark hairs. Antennae (Fig. 25): scape and pedicel subshining brown with black hairs: flagellum bright orange. Palpi (Fig. 27) dark brown with mostly black hairs; segment 2 with a broad median longitudinal groove. Proboscis dark brown.

Thorax. Mesonotum, scutellum and pleura shining black-brown with concolorous hairs except for humeral lobe which is grey pollinose. Legs entirely black-brown and, excepting some orange hairs on the ventral surfaces of the tarsi, with concolorous hairs. Wings entirely smoky-brown with costal cell darker. Squamae pale brown with a white hair tuft. Halteres dark brown.

Abdomen entirely shining black with concolorous hairs except for the genitalia which are orange.

Lengths. Body 12 mm, wing 11 mm.

Description. Paratype ♂.

Similar to ♀ apart from the usual sexual differences but with the wings faintly smoky, contrasting with the dark brown costal cell. Palpi (Fig. 29) dark brown with long dark hairs and a round bare area at tip.

Material examined. SOUTH AFRICA, Cape Province: ♀ holotype, Laaiplek, (3319DD), 9.x.1977, R. M. Miller (NM); 1 ♀ paratype, Somerset West Strand, 25.xi.1925, C. Brauns (NM); 1 ♂ paratype, Citrusdal District [no date or collector] (BMNH); 1 ♂ paratype, Clanwilliam, 1896, Leipoldt (BMNH). NM Type No. 3377.

Remarks. *R. milleri* is closely related to *costata* Loew but differs in the characters given in the key. The differences are small, but seem consistent.

I have examined the ♂ holotype of *Pseudoscaptia scoliiformis* Enderlein (in ZMB) which, as suggested by Oldroyd (1957), may also be the type of *costata* Loew. The type is dirty and the antennae are broken but since the hair tufts on the squamae are dark brown there is no doubt as to which species these names should apply. I have also seen the following material of *costata*. SOUTH AFRICA, Cape Province: 19 ♂ 2 ♀ Willowmore, various dates in ix. and x.1915–1921, Dr C. Brauns (NM, BMNH); 1 ♀, 10 km. E. of Garies (3017DB), 3.ix.1981, J. G. H. Londt, L. Schoeman & B. R. Stuckenberg (NM); 1 ♂ 1 ♀, Victoria W., Nieuweveld, Melton Wold [no dates or collector] (BMNH).

Subgenus *Rhigioglossa* Wiedemann

Rhigioglossa Wiedemann, 1828:105. Type species: *Rhinomyza edentula* Wiedemann, 1828, by monotypy (as *edentula* with *'Rhigioglossa testacea'* Wiedemann loc. cit. in synonymy). [Generic name first published in synonymy with *Rhinomyza* but available under ICZN *Code* Article 11(d).]

Erodiorhynchus Macquart, 1838:114(110). Type species: *Erodiorhynchus eristaloides* Macquart, 1838 [= *Rhinomyza edentula* Wiedemann, 1828], by monotypy.

Scarphia Walker, 1850:10 (as subgenus of *Pangonia*). Type species: *Pangonia directa* Walker, 1850 [= *Rhinomyza edentula* Wiedemann, 1828], by monotypy.

Metoponaplos Ricardo, 1915:124. Type species: *Pangonia parva* Walker, 1848 [= *Rhinomyza edentula* Wiedemann, 1828], by monotypy.

This is a variable group structurally. The species generally have bare or very short-haired eyes, ♀ frons and median occipital sclerite mostly shining black with only narrow strips of grey tomentum at sides, subcallus hairy at sides, antennae with terminal segments often appearing fused and a slender, often long, proboscis. Mesonotum shining black, occasionally with sublateral pollinose stripes.

Key to species of *Rhigioglossa (Rhigioglossa)* [both sexes]

1 Eyes with short hairs (indistinct at low magnification). Mesonotum with distinct grey pollinose sublateral stripes. Frons as in Fig. 31 **pusilla** (Schiner)

— Eyes bare. Mesonotum without distinct sublateral stripes. Frons as Figs 35, 40, 43–44 2

2 Subcallus without hairs. Proboscis short, distinctly shorter than head is high [♂ unknown] .... ♀ **obtundata** (Oldroyd)

— Subcallus with hairs at sides. Proboscis longer, at least equal to height of head 3

3 ♂ with eyes widely separated. ♀ with broader, square frons (Figs 43–44) **nitens** sp. n.

— ♂ with eyes almost touching (at most separated as Fig. 34). ♀ with narrower frons 4

4 Femora mostly orange. Wings brown, but with extreme base more yellowish [♂ unknown] .... ♀ **namibiensis** sp. n.

— Femora black. Wings brown or clear 5

5 ♂ head more rounded when viewed from in front (Fig. 37), with eyes broadly touching and upper eye-facets enlarged and differentiated from lower facets. Tibiae largely light brown or reddish. Wings clear or faintly tinted along veins, with light brown costal cell .... **edentula** (Wiedemann)

— ♂ head less rounded (Fig. 34), with eyes narrowly separated and upper eye-facets not enlarged and differentiated from lower facets. Legs almost entirely black, tibiae only brownish at extreme base. Wings light brown, darker along the veins, with dark brown costal cell .... **capensis** sp. n.

Rhigioglossa (*s. str.*) **capensis** sp. n.

Description. Holotype ♂.

Head. Eyes bare, slightly separated (Fig. 34). Long pale yellow hairs between eyes. Large ocellar tubercle which is shining black with long pale yellow hairs. Frontal triangle grey pollinose. Subcallus large and prominent; grey pollinose with long yellow hairs at sides. Parafacials grey pollinose with long yellow hairs. Face subshining dark brown through thin grey tomentum and long yellow hairs. Occipital rim grey with short whitish hairs. Beard pale yellow. Antennae blackish (Fig. 36): scape and pedicel with long, mixed pale yellow and black hairs; flagellum reddish at base. Palpi (Fig. 39) dark reddish-brown with a few long black hairs. Proboscis black; slender, about as long as head is high.

Thorax entirely shining black with dense covering of long pale yellow hairs. Tibiae slightly reddish at base, but otherwise legs entirely black with black hairs. Wings light brown, more heavily stained along veins and in costal cell. Squamae whitish. Halteres black.

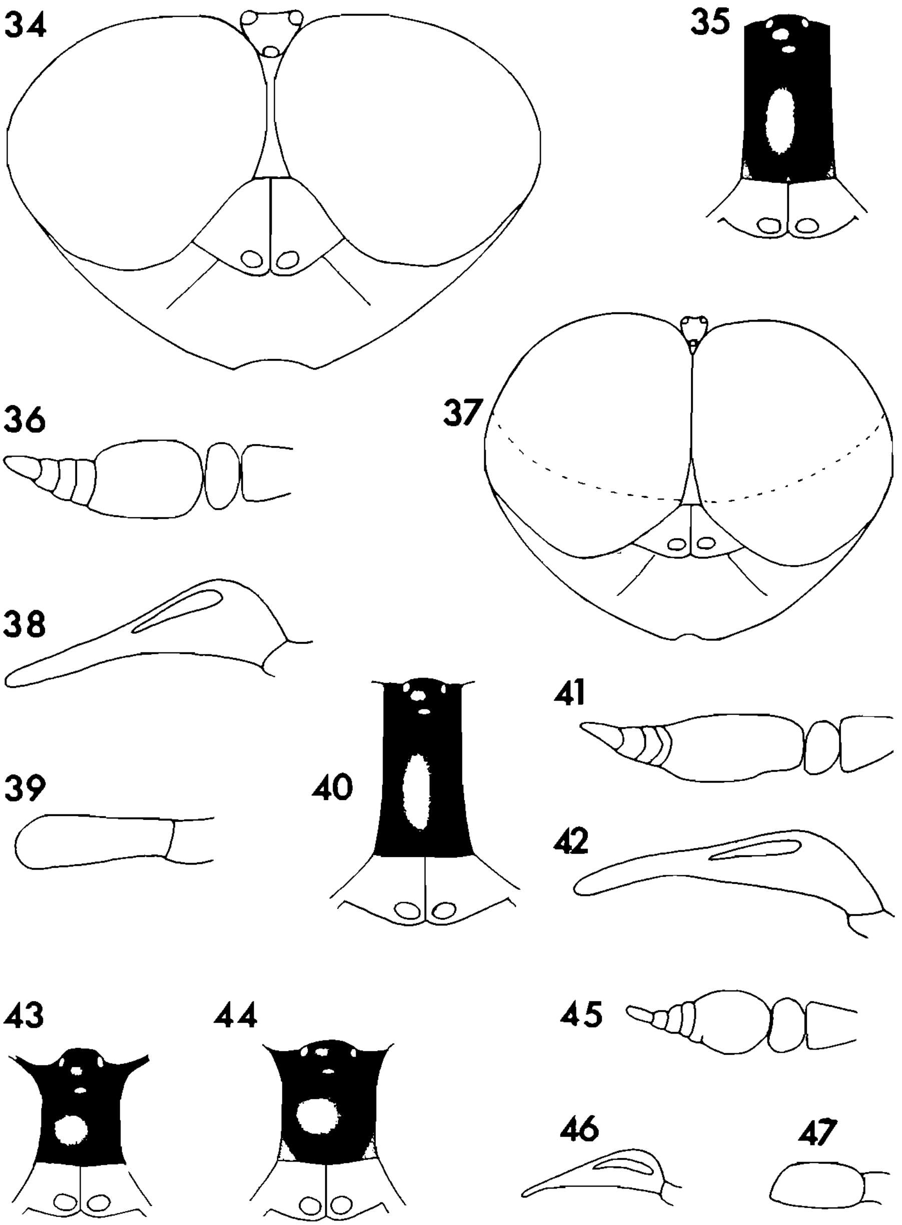
Abdomen dorsally shining black with hind-margins of tergites pale yellow pollinose and basal three tergites orange at sides; hairs concolorous with background. Venter similar but sternites 2 and 3 almost entirely orange.

Lengths. Body 11 mm, wing 9,5 mm.

Description. Paratype ♀.

Head. Frons (Fig. 35) slightly divergent (index 1,5), shining black except for narrow strips of grey tomentum at sides. Hairs at sides of frons and at vertex mixed pale yellowish and black. Subcallus less prominent than in male. Palpi (Fig. 38) grooved longitudinally. Otherwise similar to male.

Thorax and *abdomen* similar to male except that the body hairs are generally



Figs 34–47. (34–36, 38–39) *R. (s. str.) capensis* sp. n.: (34) ♂ head, (35) ♀ frons, (36) ♀ antenna, (38) ♀ palp, (39) ♂ palp. (37) ♂ *R. (s. str.) edentula* Wiedemann: head. (40–42) ♀ *R. (s. str.) namibiensis* sp. n. (40) frons, (41) antenna, (42) palp. (43–47) *R. (s. str.) nitens* sp. n.: (43) ♂ frons, (44) ♀ frons, (45) ♀ antenna, (46) ♀ palp, (47) ♂ palp.

shorter and the orange areas on the abdomen are restricted to the sides of tergites 1 and 2 and the hind-margins of sternites 2 and 3.

Material examined. SOUTH AFRICA, Cape Province: ♂ holotype, Worcester, ix.–x.1931, R. E. Turner (BMNH); 1 ♂ 4 ♀ paratypes, same locality but with dates ix.1928, 17–31.viii.1928, ix–x.1931 (BMNH); 1 ♀ paratype, Montagu, 23♀30.ix.1924, R. E. Turner (BMNH); 1 ♂ 7 ♀, Montagu Botanical Gardens (3320CC), 10.ix.1981, J. G. H. Londt, L. Schoeman & B. R. Stuckenberg, Karroid broken veld (NM, BMNH) attempting to bite man; eyes bright green in life. NM Type No. 3378.

Rhigioglossa (*s. str.*) *edentula* (Wiedemann)

A short series of 3 ♀ from NAMIBIA, 30 km. N. of Rosh Pinah (2716DA), 1.ix.1983, J. G. H. Londt & B. R. Stuckenberg (NM, BMNH), represent the first record of this species from that country. At this locality there occurs a northern outlier of the Cape flora.

Rhigioglossa (*s. str.*) **namibiensis** sp. n.

Description. Holotype ♀.

Head. Eyes bare. Frons (Fig. 40) slightly divergent (index 1,8), almost entirely shining black with mostly pale yellowish hairs at sides and vertex. Subcallus grey pollinose with dark hairs at sides. Parafacials similar but with pale yellowish hairs. Face shining black medially, orange laterally with thin greyish tomentum; sparse black hairs medially but more numerous pale yellow hairs laterally. Occipital rim grey with pale yellowish hairs. Beard pale yellow. Antennae (Fig. 41): scape and pedicel yellow-brown with black hairs; flagellum with long basal segment bright orange and terminal segments black. Palpi (Fig. 42) yellow-brown with mostly black hairs. Proboscis black; slightly longer than head is high.

Thorax entirely shining black with dense covering of pale yellowish hairs. Femora orange, darker at base (especially on fore femora) with mixed black and yellow hairs. Tibiae yellow-brown, black haired, fore and hind tibiae darker apically. Tarsi concolorous with apices of tibiae. Wings smoky-brown except for costal cell and extreme base which are yellow. Squamae pale yellowish. Halteres black.

Abdomen shining black dorsally, with tergites 1–3 extensively orange at sides, the orange colour narrowly expanding across tergites 2 and 3 just before the hind-margins. Hind-margins of tergites narrowly whitish with pale yellowish hairs that are expanded into small median triangles and lateral tufts. Hairs of tergites otherwise black. Venter similar but with sternites 2 and 3 entirely orange with pale hairs and hind-margins without median triangles.

Lengths. Body 11 mm, wing 9,5 mm.

Material examined. NAMIBIA: ♀ holotype, 72 km. S. of Aus (2716AB), 1.ix.1983, J. G. H. Londt & B. R. Stuckenberg, broken veld in dry river bed/open area (NM); 1 ♀ paratype, same data (BMNH); 1 ♀ paratype, 10 km. W. of Aus (2616CA), 30.viii.1983, J. G. H. Londt & B. R. Stuckenberg, sparse grassveld—small woody plants (NM). NM Type No. 3379

Rhigioglossa (*s. str.*) **nitens** sp. n.

Description. Holotype ♂.

Head. Eyes bare, widely separated. Frons (Fig. 43) slightly higher than broad at base (index 1,25), shining black with a narrow strip of greyish tomentum at each side, scattered black hairs and a large swollen tubercle at vertex. Subcallus grey pollinose with whitish hairs laterally. Face subshining black through dark grey-brown tomentum and with black hairs. Parafacials grey pollinose with whitish hairs. Occipital rim grey pollinose with pale yellow hairs. Beard pale yellow. Antennae (Fig. 45) black: scape and pedicel black haired and flagellum with four poorly defined terminal segments. Palpi (Fig. 47) dark brown with black hairs; second segment not excavated. Proboscis quite long (equal to height of head) with slender labellae; black.

Thorax subshining black-brown with light brown hairs. Femora dark brown with mostly light yellowish hairs. Tibiae and tarsi black with concolorous hairs. Wings light smoky-brown, slightly darker along veins and in costal cell. Squamae pale yellow. Halteres brown.

Abdomen subshining black dorsally with tergites 1–3 orange laterally and all tergites with hind-margins narrowly yellow-brown; short, pale yellow haired along hind-margins, otherwise with long black hairs. Venter similar but with sternites 2–4 dull orange.

Lengths, Body 8 mm, wing 6,5 mm.

Description. Paratype ♀.

Generally similar to ♂ but with frons slightly broader (Fig. 44), the orange markings on the basal 3 tergites less extensive and sternites 4–7 with broad yellowish hind-margins. Palpi (Fig. 46) with deep longitudinal groove.

Material examined. SOUTH AFRICA, Cape Province: ♂ holotype, 17 km. S. of Kamieskroon, (3017BD), 5.ix.1983, J. G. H. Londt & B. R. Stuckenberg, slopes with succulent plants and bushes (NM); 3 ♀ paratypes, 8 km. E. of Kamieskroon (3018AA), 5.ix.1983, J. G. H. Londt & B. R. Stuckenberg, montane old land with rocks and bushes nearby (NM, BMNH); 1 ♂ paratype, Studer's Pass, 22 km. NE. of Garies (3017AC), 6.ix.1983, J. G. H. Londt & B. R. Stuckenberg, stream edge and rocky slopes (BMNH). NM Type No. 3380.

Remarks. This species is remarkable in having the eyes of the male widely separated, a character previously regarded as diagnostic of subgenus *Pronopes* Loew. Species of *Pronopes* may be separated by their obviously hairy eyes.

Rhigioglossa (*s. str.*) *pusilla* (Schiner)

I have seen a ♀ syntype (NMW; here designated as lectotype) which is in good condition apart from slight pest damage to the head. *R. pusilla* is difficult to place since it shows characters that are intermediate between *Rhigioglossa (s. str.)* and *R. (Mesomyia)*. The eyes have short but inconspicuous hairs, the ♀ frons is slightly more extensively pollinose than other *Rhigioglossa (s. str.)*, the proboscis is slender, though shorter than head is high, and the pleura are densely pollinose. The last two characters are shared with *R. (s. str.) obtundata* (Oldroyd).

Species excluded from *Rhigioglossa*

Diachlorus barbatus Bigot, 1892:622.

This species was described from Piedmont, Italy, but was subsequently placed, by Kröber (1925) and others, as a senior synonym of the North African *Surcoufia paradoxa* Kröber. However, Moucha (1972) stated that 'in reality it is an Ethiopian species of the genus *Mesomyia* similar to *Mesomyia aurantiaca* Oldroyd, 1957, but not identical with it (Oldroyd det., 1970)'. I have examined the holotype in OXF and am certain that it is not close to *aurantiaca* despite superficial similarities. It has bare eyes and since the scape is over twice as long as the pedicel it should be placed in the Chrysopsini. I have not seen the type of *Surcoufia paradoxa* Kröber but, from the description, would say that it is the same as *barbatus*.

Rhinomyzopsis longipennis Séguy, 1950:290

Oldroyd (1957) provisionally placed the monotypic *Rhinomyzopsis* in synonymy with subgenus *Bacloceras* [= *Mesomyia*]. The type species, *longipennis* Séguy, is known only from the holotype ♂. I have not seen the type but am certain that it is not close to subgenus *Mesomyia* since it has bare eyes. Oldroyd (1957) states that, in addition to the unusual antennae, the wings have a distinct cross band. This suggests that *longipennis* may be a species of *Gressittia* or even belong to Rhinomyzini. Until further material, including females, becomes available *Rhinomyzopsis* is probably best returned to its original status as a monotypic genus.

Tabanus oritensis Bigot, 1892:677.

This species was described as being from 'Caucase'. It has remained uncertainly placed although Moucha (1972) said it was 'in reality a species of *Mesomyia*, quite close to some African species of the subgenus *Perisilvius*'. I have seen the holotype ♂ in OXF; it is complete, although rubbed, and is here considered to be a senior synonym of the Nearctic *Apatolestes villosulus* Bigot (**syn. n.**)

Silvius pulchripennis Austen, 1937*a*:34 [1937*b*:289]

This species was included by Oldroyd (1957) in subgenus *Perisilvius*. It was transferred to *Gressittia* by Philip & Mackerras (1960) and this remains its current placement. The conspicuously banded wings separate this species from all *Rhigioglossa*.

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